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Abstract

This study reports the results of the process evaluation component of the Process and Outcome Evaluation of the Gang Resistance Education and Training (G.R.E.A.T.) program. The process evaluation consisted of multiple methods to assess program fidelity: (a) observations of G.R.E.A.T. Officer Trainings (G.O.T); (b) surveys and interviews of G.R.E.A.T.-trained officers and supervisors; (c) surveys of school personnel; and (d) “on-site,” direct observations of officers delivering the G.R.E.A.T. program in the

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study sites. Results illustrate a high level of program fidelity, providing greater confidence in any subsequent outcome results.

Keywords

fidelity, process evaluation, program evaluation, prevention

The demands for implementation and dissemination of “evidence-based practices”—those which have been found to meet their primary goals through rigorous scientific scrutiny—have gained substantial momentum during the past decades. At the same time, there has been renewed emphasis on *prevention*, rather than reaction. Consequently, research focusing on “what works” has become an increasing priority in order to help develop, modify, and replicate successful programs and policies (see, for example, the efforts of Elliott and Mihalic 2004; Fagan and Mihalic 2003; McHugo et al. 2007; Mihalic and Irwin 2003). The general public wants social problems “fixed,” policymakers are expected to “do something,” and practitioners want to know that they are “making a difference,” all the while being conscience of the “bottom-line” that “resources are limited.” While these foci have permeated many settings, they have become increasingly important in school-based settings, where constraints posed by mandated curricula mean that limited time for prevention should be well-spent, on programs with demonstrated efficacy (see Gottfredson 2001 for an excellent review of findings from evaluations of school-based prevention programs).

Program Fidelity: What is it and Why is it Important?

In the search for “what works,” it is equally important to understand *how* and *why* certain interventions are more successful than others (Dusenbury et al. 2003). The issues of “how” and “why” of program success are typically determined through process evaluations. *Program fidelity*, or the degree to which program providers deliver the program as intended (Dusenbury et al. 2003), includes a number of dimensions, including *adherence*, *dose*, *quality*, *participant responsiveness*, and *program differentiation* (Dane and Schneider 1998). Dumas and colleagues succinctly stated (2001, 38): “In outcome research, an intervention can be said to satisfy fidelity requirements if it can be shown that each of its components is

delivered in a comparable manner to all participants and is true to the theory and goals underlying the research.”

Without evidence that a program has been implemented properly, it is difficult to determine whether a program “works,” or meets its intended goals (Kovaleski et al. 1999; Rossi, Freeman, and Lipsey 1999). In fact, a substantial body of research indicates that lack of program *fidelity*—rather than failure of the program *design*—is one of the primary explanations for the failure of prevention programs (see Dusenbury et al. 2003 for an excellent review). Thus, outcome evaluations failing to take into account the degree of program fidelity may lead to a “Type III error,” or erroneously concluding that outcomes indicating the degree of program success are due to the specific intervention under examination when, in fact, that is not the case (Basch et al. 1985; Dobson and Cook 1980). This is not a trivial issue, as meta-analyses have found that program effect sizes can vary substantially depending upon the degree of program fidelity (Durlak and DuPre 2008; Lipsey 2009).

In addition to providing greater confidence that outcome effectiveness results are truly related to the program, evaluations of program fidelity allow for two additional outcomes: (a) they help identify programs and program components that can be exported to and implemented in other locations; and (b) they provide a greater understanding of potential barriers and remedies when programs are being implemented in different locales (Heller 1996; Melde, Esbensen, and Tusinski 2006; Teague, Bond, and Drake 1998). For example, recent work from the *Blueprints for Violence Prevention* (Elliott and Mihalic 2004; Fagan and Mihalic 2003; Mihalic and Irwin 2003) and the *National Implementing Evidence-Based Practices Project* (McHugo et al. 2007) have illustrated the difficulties of implementing and replicating even the most effective programs in multiple settings, which has the potential to “undermine public confidence in scientific claims that we have programs that work” (Elliott and Mihalic 2004, 52). Dissemination of well-executed process evaluation documentation, however, has the potential to ease the implementation process for program providers and allows for more public confidence that effective programs are available and possible to deliver. Indeed, finding methods to enhance implementation of evidence-based practices provides a “bridge” between research and practice (Fagan et al. 2008).

Current Study

Although program fidelity is recognized as being of critical importance and assessments are becoming more common, they remain rare. Even less common are fidelity studies that include multiple methodologies (e.g., combining

surveys of program stakeholders with direct observation of critical program components provides necessary information about the program under review; Lillehoj, Griffin, and Spoth 2004; Melde et al. 2006). Dusenbury and colleagues (2003) provide a guide of areas that should be examined: (a) teacher (i.e., program provider) training; (b) program characteristics (e.g., as outlined in program manuals); (c) teacher (i.e., program provider) characteristics; and (d) organizational characteristics (e.g., support and cooperation of the host organization).

Drawing upon prior research on program fidelity, this study reports the results of the process evaluation component of the Process and Outcome Evaluation of the Gang Resistance Education and Training (G.R.E.A.T.) Program. To thoroughly assess fidelity of the G.R.E.A.T. program, we evaluate three primary areas where implementation may breakdown: (a) officer preparedness and commitment to the program (i.e., program provider training); (b) support and involvement of educators; and (c) program delivery (i.e., officers' actual ability to deliver the program in the schools as designed). In order to assess these areas, data were collected from four primary sources: (a) observations of G.R.E.A.T. Officer Trainings (G.O.T) to assess the quality of the training that officers receive before being sent into classrooms; (b) surveys and interviews of G.R.E.A.T.-trained officers and supervisors to determine their own perceptions of preparedness and the level of commitment to delivering the program; (c) surveys of school personnel to evaluate officers' abilities as instructors and educators' involvement in the program; and (d) approximately 500 "onsite," direct observations of 33 different officers delivering the G.R.E.A.T. program in 31 schools in seven cities to determine the quality of program implementation.

We begin with an overview of the G.R.E.A.T. program and a description of the multiple methods used in this evaluation. Overall assessments of program fidelity in the areas of officer preparedness to teach and commitment to the program, educators' support and involvement, and quality of program delivery, as well as observed strengths and barriers, are discussed, drawing on findings of each component of the process evaluation. We conclude with a discussion of how findings from the current study help to inform both specific recommendations for the G.R.E.A.T. program stakeholders and the larger issues associated with program fidelity.

Overview of the G.R.E.A.T. Program

The G.R.E.A.T. program is a gang and delinquency prevention program delivered by law enforcement officers within a school setting. Thus, a

number of stakeholders are involved, primarily (a) law enforcement agencies and their officers and (b) schools and their personnel and students. Developed as a local program in 1991 by Phoenix area law enforcement agencies, the program quickly spread throughout the United States (see Winfree, Peterson Lynskey, and Maupin 1999). The original G.R.E.A.T. program operated as a nine-lesson lecture-based curriculum taught primarily in middle-school settings. While initial results from the 1995 cross-sectional study were promising (Esbensen and Osgood 1999), those from the more methodologically rigorous longitudinal, panel study of the program between 1995–1999 found a few delayed attitudinal program effects differentiating G.R.E.A.T. and non-G.R.E.A.T. youths, but no differences in terms of behavioral characteristics (i.e., gang membership and involvement in delinquent behavior; Esbensen et al. 2001).

Based in part on these findings, the G.R.E.A.T. program underwent a critical review that resulted in substantial program modifications based upon effective evidence-based practices (see Esbensen et al. 2002 for a description of this process). The revised curriculum (see Appendix A) consists of 13 lessons aimed at teaching youth's evidence-based life skills (e.g., communication and refusal skills, as well as conflict resolution and anger management techniques) necessary to prevent involvement in gang behavior and delinquency. The revised G.R.E.A.T. curriculum was piloted in January 2001 with full-scale implementation occurring the following year.

The program's two main goals are:

1. To help youths avoid gang membership, violence, and criminal activity.
2. To help youths develop a positive relationship with law enforcement.

The evaluation consists of a number of different components, including student surveys, classroom observations, surveys of teachers and law enforcement officers, interviews with G.R.E.A.T. officers and G.R.E.A.T. supervisors, and observations of G.R.E.A.T. Officer Training (G.O.T.).

Site Selection

During the summer of 2006, efforts were made to identify cities for inclusion in the Process and Outcome Evaluation of G.R.E.A.T. Site selection was based upon three main criteria: (a) existence of an

established G.R.E.A.T. program; (b) geographic and demographic diversity; and (c) evidence of gang activity. Sites were selected with consideration to the following factors: the length of time the program had been in operation; the number of G.R.E.A.T.-trained officers; the number of schools in which the program was offered; and the components of the G.R.E.A.T. program implemented. Each potential city also had demonstrable youth gang activity according to the National Youth Gang Center (now the National Gang Center). Consideration was given to the representativeness of the selected sites in terms of both the program and the targeted audience. That is, program-related variables such as police department size and organizational structure may affect program delivery. Some G.R.E.A.T. programs, for instance, utilize School Resource Officers (SRO) to teach the program while others use the "Portland" model in which "street cops" teach the program on an overtime basis in schools on their beat. Other program-related characteristics that we considered include school size, length of program history at a site, and size and degree of program implementation. Site characteristics that were considered include population characteristics (i.e., race and ethnic composition, and population size), volume of youth crime and gang activity, and geographic location. Without consideration of such factors it would be difficult to address the extent to which the program is adaptable to different settings and audiences. Because G.R.E.A.T. is a universal prevention program, it was important that the evaluation address the extent to which G.R.E.A.T. is effective in diverse settings. Ultimately, seven cities varying in size, region, and level of gang activity were recruited into the study (Albuquerque, New Mexico, Chicago, Illinois, a location in the Dallas/Ft. Worth (DFW) area in Texas, Greeley, Colorado, Nashville, Tennessee, Philadelphia, Pennsylvania, and Portland, Oregon).

Once the cities were selected, the research staff worked with the primary local law enforcement agency and the school district in each city to secure their cooperation. Four or five schools in each city were selected with the goal of selecting schools that, taken as a whole, would be representative of the districts. School and police personnel were informed of the purpose of the evaluation, issues related to the random assignment of classrooms to the treatment condition (i.e., receive G.R.E.A.T./not receive G.R.E.A.T.), procedures to obtain active parental consent for students in these classrooms, scheduling the G.R.E.A.T. program delivery, and other logistical issues associated with the study design.

Data and Methods

Observations of G.O.T.

Prior studies have highlighted that good training for program providers increases the likelihood that programs will be implemented with fidelity (Dusenbury et al. 2003). To examine the training aspect of the G.R.E.A.T. program, we conducted observations of eight G.O.T. sessions from June 2006 to August 2008. Each of the original five G.R.E.A.T. regions (i.e., Midwest, Northeast, Southeast, Southwest, and West) coordinated delivery of the standard (G.O.T) in its region. At least one training session was observed in each of the five G.R.E.A.T. regions in the event of site-specific variation in training. In total, two G.O.T.s were observed in the Midwest, one in the Northeast, one in the Southeast, two in the Southwest, and two in the West. G.O.T.s are available in two programs. The 40-hour (i.e., one week) training is available for officers with prior teaching experience and an 80-hour, two weeks, training is available for officers with no prior experience.¹ Both types of training are taught by the same staff.² Six observations of the 40-hour program were completed and two of the 80-hour sessions.³ Observers took detailed notes during each day of training and evaluated each G.O.T. session on (a) coverage of the G.R.E.A.T. components, (b) styles and strategies for effective classroom delivery, and (c) adherence to training guidelines.

Surveys and Interviews With G.R.E.A.T. Officers and Supervisors

Surveys were sent to all G.R.E.A.T.-trained officers (mean = 24.8, range = 6–55) in six of the seven cities participating in the evaluation. The seventh site, Chicago, had over 150 G.R.E.A.T.-trained officers, so surveys were sent to a random sample of 40% of these officers ($n = 56$). In total, 205 surveys were distributed and 137 were returned (66.8%). By city, the survey response rate ranged from 37.5% in Chicago to 89.7% in Nashville. Survey packets included an anonymous survey, a sealable postage-paid envelope, and a brief letter explaining the G.R.E.A.T. evaluation and the purpose of the officer surveys. In addition to personal and professional descriptive information, officers were asked for the reasons they became G.R.E.A.T. officers, their opinion on the effectiveness of the program design and lessons, and their experiences actually teaching the program. The survey sample was mostly male (75%) and 65.2% White (17.8% African American, 10.4% Hispanic, and 6.6% other race/ethnicity) with an average of 16 years in law enforcement ($SD = 7.5$). In addition to the surveys, we conducted

face-to-face or telephone interviews with the officers who taught the program in the 25 of the 31 schools participating in the evaluation (we were not permitted to interview Chicago Police Department personnel) and with five of the G.R.E.A.T. supervisors. The supervisor interview instrument included 10 questions, asking them to describe the reasons for and extent of their agency's involvement in the G.R.E.A.T. program; where G.R.E.A.T. fits in the broader agency picture and mission; how officers are selected for G.R.E.A.T.; their role as supervisor and major challenges faced in that role; relationships with the schools; and the extent of the gang problem in the area and schools.

We interviewed 27 of the 33 officers delivering the program in the study setting. In addition to the four officers from Chicago to whom we were not granted access, one officer in Portland and one in Albuquerque could not be reached. Each interview lasted approximately 30 min and included 14 questions. Officers were asked to describe the reasons for and extent of their involvement in the G.R.E.A.T. program; where G.R.E.A.T. fits in the broader agency picture and mission; the major challenges of program delivery; the support they have received from their agency and the other related organizations (e.g., National Training Team); the resulting relationship with the schools; and the extent of the gang problem in the area and schools. Officers were also asked specifics about their program delivery, such as the lessons they consider to be the most effective, their recommendations for changes to the curriculum, and whether they had ever skipped or combined lessons and, if so, the reasons this was necessary.

Survey of School Personnel

Surveys were also distributed to all school administrators (Principals and Vice/Assistant Principals) and all teachers and coordinators at the grade level in which G.R.E.A.T. was taught in the 31 schools under evaluation. Surveys, a cover letter explaining the purpose, and a small gift were distributed to 29 schools in spring of 2007. The response rate was much lower than desired. Only 29.1% of the sample returned completed surveys (range of 13.5–54.2% across sites). Schools with very low-return rates and two newly added schools to the evaluation were resurveyed in fall 2008. This attempt yielded a 58.4% return rate (range of 40.4% in two sites to 90% in Nashville). Surveys from both attempts were combined for analyses.⁴ In total, 373 surveys were distributed and a 61.7% combined response was achieved ($n = 230$ nonduplicate surveys). Most survey respondents were teachers (83%) and female (68%), 75% were White (12% Black, 4% Hispanic/

Latino, and 8% were of other or multiracial/ethnic background), and 64% taught primarily sixth grade.

All school personnel were asked about their professional history, their opinions on the issues facing their schools, school climate and job satisfaction, their perceptions of school-based prevention programs in general, and their views about police officers in schools. Educators with a personal knowledge of the G.R.E.A.T. program were asked their opinions about the basic purpose and design of the program. In total, 186 of the 230 respondents (82% of the sample) reported familiarity with the program. This included 92% of administrators and 79% of teachers. Finally, teachers who had had G.R.E.A.T. taught in their classrooms were asked to comment on their most recent experience with the program and their opinion of the G.R.E.A.T. officer. In total, 96 respondents (42% of the sample and 52% of those familiar with the program) reported G.R.E.A.T. had been taught in their classrooms.

Observations of G.R.E.A.T. Implementation in Classrooms

Classrooms were randomly assigned in each school to receive the program or serve as controls.⁵ Members of the national evaluation team conducted observations of officers delivering the G.R.E.A.T. program in each of the seven evaluation sites from September 2006 to May 2007. A 41-page program delivery instrument (three to four pages for each of the 13 lessons) was created for use in the field. The instrument, based upon the material contained in the G.R.E.A.T. Instructor's Manual, included measures of (a) the main components of G.R.E.A.T. organized by lesson (i.e., adherence to program design and coverage of topical areas), (b) time spent per lesson component and lesson and overall time management, (c) general measures of student involvement and engagement with officer, and (d) overall lesson quality. This instrument contained both quantitative (in the form of checklists where observers recorded the presence or absence of particular aspects such as coverage of particular lesson content) and qualitative (i.e., space for observers to record open-ended comments about, for example, the discussion or activities of the lesson) components. Observers also made note of any unusual occurrences during the lesson. In total, 492 unique observations and 26 sets of interrater reliability (IRR) observations were completed for this evaluation.⁶ A total of 33 officers taught the program in the seven study sites. Four officers taught the program in each of five cities: Albuquerque, Chicago, DFW-area site, Greeley, and Nashville. Five officers were observed in Philadelphia, and eight different officers were included in

Portland. Each officer was observed an average of 15 times during this evaluation (range of 6–27), though we observed 19 different officers a minimum of 26 times. Each lesson was observed at least once in every site with four exceptions (not observed were Lessons 12 and 13 in Chicago and Lessons 7 and 11 in Nashville) with each lesson observed an average of 38 times (range of 26–53). Results of classroom observations presented in this article are derived from the 492 unique observations of program delivery.

Results

Drawing on data obtained from the four methods described previously, we examine three specific areas related to program fidelity: (a) G.R.E.A.T. officer preparedness and commitment to program delivery; (b) the support and involvement of educators in participating study schools; and (c) quality of G.R.E.A.T. program delivery. The latter includes an assessment of officers' time management and ability to control the classroom, teacher involvement, and overall quality of delivery.

Officer Preparedness and Commitment to Program Delivery

In order to have any likelihood of program fidelity, the individuals implementing the program must be well-informed of the mission, intention, and purpose of the program. To assess officer preparedness and commitment to program delivery, we rely on the observations from G.O.T., surveys and interviews with G.R.E.A.T. officers, and, to a lesser degree, school personnel assessments of officers' abilities in the classroom.

Officer preparedness. The purpose of the G.O.T. is to provide police officers with the skills needed to successfully teach the G.R.E.A.T. program to middle-school students. Officers arrive at G.O.T. with a range of prior teaching experiences, and the training is intended to cater to all levels of teaching ability. Overall, observers concluded that the G.O.T. provided officers with sufficient knowledge and skill to be effective at implementing the program. The evaluation showed that G.R.E.A.T. trainers adhered to the training guidelines and provided sufficient coverage of all of the G.R.E.A.T. curriculum components.

Coverage of the program was provided using both overviews of lessons (i.e., trainers would review the materials of the lesson) and lesson modeling (i.e., trainers would teach the lesson in full to the trainees as if they were

middle-school students). Officers in the 80-hour training were allowed sufficient opportunity to improve their teaching abilities. Officers practiced their public-speaking every day in the two-week training. At the beginning of the training, presentations were only two to three minutes long. Officers received feedback from other trainees and team leaders, and eventually presented an overview of a G.R.E.A.T. lesson. Different trainers modeled G.R.E.A.T. lessons for the trainees to present a variety of teaching styles. In addition, educational specialists led good discussions of pedagogy and introduced various methods of teaching a middle-school student audience. Gang experts (often police officers in gang units) exposed officers to trends in gang crime and gang research.

All indicators suggest that officers who complete G.O.T. should be sufficiently prepared to teach the program. Consistent with this finding, all of the G.R.E.A.T.-trained officers we interviewed during this evaluation stated that they felt prepared to deliver the program after training. It may be, however, that the most critical judges of officer preparedness may not be objective observers of their training or the officers themselves, but rather the teachers in whose classrooms the G.R.E.A.T. program is delivered. Of the school personnel who reported G.R.E.A.T. being taught in their classroom, 85% “agreed” or “strongly agreed” that officers appeared adequately trained to deliver program content.

Our process evaluation, however, does not suggest that there is no room for improvement. Observers of the G.O.T. consistently noted one area in need of improvement for officer preparedness was time management. The G.R.E.A.T. curriculum uses a “building-block” approach to skills building with each lesson building upon prior ones lessons in the 13-lesson series. The G.O.T. sessions provided “modeled” lessons, or lessons as they should be delivered in the classrooms. Each G.R.E.A.T. lesson in the curriculum is designed to be taught in 40–45 min, but generally, trainers modeled the lessons in a one-hour time frame (and in some instances, observers noted that trainers did not or could not complete the lesson within an hour). This one-hour time frame may be unrealistic in practice, given that middle-school class periods are generally shorter than 50 min. The G.O.T. modeling lessons may overestimate the time allotted for G.R.E.A.T. teaching in practice, and thus, may be underpreparing officers for time management in the field.

To help assess program delivery and the concern raised from observations at G.O.T. regarding time management, surveyed officers were asked if they ever combined or skipped lessons, while they were teaching. In total, 31.7% of surveyed officers reported that they had combined or skipped a lesson. Those officers who did skip at least one lesson reported doing so

most often toward the end of the 13-week program (i.e., 76.5% skipped one lesson between Lessons 8 through 13). The primary reason (62.2%) offered for skipping or modifying the lesson was time constraints due, for example, to shortened class schedules or to attempts to complete the 13-lesson program in a specified time period during the school year. The effect of time management on the fidelity of program delivery will be addressed in the latter half of this article.

Another potential area for improvement emerged from officer interviews and school personnel surveys. Some G.R.E.A.T. officers reported that, despite their feeling prepared to teach the program, they would have benefited from more instruction on how to manage the classroom (i.e., deal with disruptive students). The survey of school personnel supported this notion. Despite a high percentage of educators agreeing that officers were prepared to teach the program, there was less agreement (only 74% “agreeing” or “strongly agreeing”) that officers were prepared for classroom management. In all 14% of school personnel indicated that, in their experience, officers had difficulty controlling the class. While the G.O.T. emphasizes the importance of soliciting teachers’ assistance and cooperation in program delivery, this area may require more attention during the GOTs. The classroom management skills of G.R.E.A.T. officers were found to be very important and are discussed in the section on program implementation.

Officer commitment. Observers of G.O.T. noted that officer enthusiasm for being a part of the training and program varied. Some officers had volunteered to attend the training and others were assigned to be there. For example, in team meetings on the first day of training, one officer said he had been trying to get to the training for years, while another suggested that he was sent because of “departmental politics.” Although officers were given the tools that they would need to effectively teach the program, it is still unclear whether all officers necessarily desired the opportunity to do so. Our surveys and interviews of G.R.E.A.T.-trained officers further explored this issue. Officers were asked why they became G.R.E.A.T.-trained. Results differed based on method. When asked to indicate the reason(s) she/he became involved with G.R.E.A.T. from a list of six possible choices (with “other” offered as a choice), a majority (85.3%) of the survey sample selected, as at least one of their answers, that they “wanted to teach” or “wanted to prevent kids from joining gangs.” By contrast, only 6 of the 27 officers interviewed using an open-ended response format indicated that working with kids was their motivation for becoming a G.R.E.A.T. officer. A majority of the interview sample reported that they taught the program

because they were assigned or required to do so as part of their regular assignment.

Variation in enthusiasm may stem from perceptions about how being a G.R.E.A.T. officer affects one's career. A majority of officers reported in the survey that teaching G.R.E.A.T. (a) does not improve their chances for promotion, (b) allows them fewer opportunities for overtime,⁷ and (c) is not well-perceived by other officers. One supervisor stated in an interview that G.R.E.A.T. officers are "looked down upon by other officers." Many officers echoed this sentiment. Over 20% of survey respondents reported that one of the aspects of being a G.R.E.A.T. officer they disliked was the "way they are viewed by other officers." Interviews with officers helped to clarify this point further. Approximately 11% of interviewed officers mentioned the perception of other officers when asked what they disliked about teaching G.R.E.A.T. in an open-ended format. These officers suggested that other officers viewed them as "lazy" or "kiddie cops."

Support and Involvement of School Personnel

Though the G.R.E.A.T. program focuses on police officers interacting with students, the involvement of school personnel must be highlighted. School personnel have the ability to be "game changers" in implementation of the program (this point will be highlighted in next section of the article). School administrators must agree to implement the program in their schools, and teachers must "give up" their instructional time for the program. The involvement of educators has always been a component of this school-based program design. This is why educational specialists attend each G.O.T. and why the G.R.E.A.T. curriculum includes "extended-teacher activities" (i.e., activities that can be incorporated by teachers into their curricula to reinforce G.R.E.A.T. lessons). If school personnel do not believe in the need for or utility of the program, they may be reluctant to assist in its implementation.

School personnel support. Surveyed school personnel were generally supportive of school-based prevention programs. Most respondents agreed that these kinds of programs could help deter youth from drugs, delinquency, and gang involvement (80%), and that it is the school's responsibility to prevent students from engaging in these kinds of behaviors (81%). However, fewer personnel reported they would like to see more prevention programs in their schools (64%), and only 56% agreed that teachers should incorporate prevention program lessons into their own curricula. Most of

the school personnel who were familiar with the G.R.E.A.T. program reported being in favor of having the program in their school (89%).

Personnel familiar with the G.R.E.A.T. program were asked to assess the program design, with most school personnel agreeing that the design is appropriate to achieve desired program goals. A total of 92% of the educators, for example, thought the curriculum was age-appropriate. Further, 82% believed that the G.R.E.A.T. program teaches the students the skills needed to avoid gangs and violence, and 85% agreed that it improves students' perceptions of police. However, only about 60% agreed that the G.R.E.A.T. curriculum was long enough and that officers had enough time in each class period to cover all of the relevant material.

School personnel involvement. Despite the importance of school personnel in the presentation and implementation in the G.R.E.A.T. program, results from observations of G.O.T. and surveys with school personnel show that educators' involvement in the program is minimal and could be improved.

Educational specialists at G.O.T. help prepare officers to deliver the program. Observations of G.O.T. revealed educational specialists' contributions are very important (especially to the longer 80-hour training for officers with no previous teaching experience). However, observers noted that after their primary presentations, educators were not utilized much at the trainings. This is noteworthy given they are experts in classroom management and age-specific behavioral issues, and they have insight into how to get classroom teachers involved in both classroom management and G.R.E.A.T. delivery. In addition, observations of G.O.T. revealed that extended-teacher activities were often glossed over by trainers (usually due to time limitations), raising the question of whether officers are familiar enough with these resources to pass them on to teachers.

Minimal teacher involvement was echoed by school personnel survey respondents who reported that G.R.E.A.T. had been taught in their classes ($n = 96$ or 42% of surveyed sample). Teachers were asked in an open-ended response format how they generally spent their time while G.R.E.A.T. was being taught in their classrooms.⁸ Teachers most often responded that they observed or listened (about 42%), assisted with discipline (about 31%), assisted the officer as needed (about 20%), and/or participated in some other manner (about 20%). Many indicated they used the time for grading or planning (31%).

Educators were also asked if they covered or reinforced any G.R.E.A.T. content in their own lesson plans (e.g., drugs, gangs, violence, culture, communication, and peer pressure). A total of 55% of school personnel did

report covering or reinforcing some G.R.E.A.T. content (most often because the content was consistent with other planned lessons), but most teachers (84%) did not use any of the G.R.E.A.T. extended-teacher activities designed by the program. Teachers often reported that they did not know these activities existed (31%) or that they did not have any time (43%). Results suggest that educational personnel are largely untapped resources that could be brought in to support the program and its implementation.

Quality of Program Delivery

Time management. Despite observer concerns that G.O.T. was overestimating the amount of time actually available to teach the program in schools, most officers did an excellent job-fitting program delivery into the allotted time frame. The average time it took to deliver a lesson was 40 min. In this study, we considered that any lesson taught in 20 min or less was not implemented as intended. This time allotment is approximately half of the estimated time recommended for each lesson by the G.R.E.A.T. curriculum. Of the 33 officers, 19 were never observed completing a lesson in less than 20 minutes. Nine officers were observed teaching one lesson under 20 minutes, three officers taught two lessons under the time, and one officer taught three lessons under the 20 minute mark. One additional officer had chronically poor adherence to time management. This officer taught more than three lessons in less than 20 minutes and was the only officer classified as poorly implementing the program based solely on time management (this officer was reassigned at the end of the year).

The result of difficulties in time management was a decrease in the quality of lesson adherence. In instances when time became problematic, sections were taught more quickly, activities and/or discussion were eliminated, and/or lessons were combined with other lessons.⁹ We previously presented concerns with combining of lessons as a solution for time management issues. In our survey of G.R.E.A.T-trained officers, almost one third of officers reported combining lessons at some point in time. They also reported that they had done so because of outside influences, such as shortened class schedules, for example, due to a fire drill, or other policing duties that pulled them from the classroom. In the classroom observations of G.R.E.A.T. delivery, we found that 8 of the 33 officers (24%) combined a lesson. Most often, officers taught more than one lesson per class to complete a prior lesson or accommodate restricted time frames for completing the program. In only one instance did it appear

that combining lessons was an attempt to reduce the length or coverage of the G.R.E.A.T. lesson. In short, the process evaluation did not conclude that lesson combining was occurring on a regular basis, nor was it systematic when it did occur.

The two most common causes of time management problems were disruptive students or atypical occurrences. Many officers displayed inventive and effective methods of classroom control, but the officers who did not have command over rowdy students most often had problems with time management. Also contributing to poor time management was the occurrence of atypical events, of which the most common (occurring 57 times) were schedule changes due to a school-sanctioned activity (e.g., assembly, fire drill, and field trip) or the officer being interrupted to perform duties related to policing (e.g., responding to a school disturbance). Other atypical situations included the presence of a substitute teacher ($n = 14$) or substitute G.R.E.A.T. officer ($n = 4$). Officers generally were not informed of changes to the schedule in advance and were forced to alter their lesson plans on arrival.

Classroom management. As stated previously, some G.R.E.A.T. officers and school personnel expressed concern with officers' ability to manage the classroom. Our evaluation found that one of the major reasons for time mismanagement (and therefore, lesson adherence) was difficulty handling problematic classroom behavior. The overall quality of the lesson relied heavily on student and teacher behavior. Observers found that students were better behaved when teachers were involved in the program and classroom management, the topic of the next section. While classroom management techniques are covered in G.O.T., this is generally in the form of trainers discussing the techniques and modeling them in the process of modeling the lessons. Officers themselves are not offered the opportunity to role-play or practice behavior management, something that may improve their confidence and effectiveness in this area.

Teacher involvement. Perhaps not surprisingly, the best lesson delivery involved strong relationships between officers, students, and teachers. Teacher involvement, in particular, was critical to improving the implementation of the program. When teachers became involved in lesson content (e.g., participated in discussion or walked around to check students' progress on activities), lessons ran more smoothly and students were more respectful, cooperative, and interested. There were some instances, however, when teachers would ignore students' misbehavior, leave the room, use the telephone, interrupt the lessons, or call students over during a lesson

to discuss non-G.R.E.A.T.-related topics. In these instances when teachers were disengaged from the program, student misbehavior increased, enhancing problems with officers' time management and lesson adherence.

Overall program implementation quality. Our analysis of overall quality of program delivery concludes that the G.R.E.A.T. program was implemented with fidelity in each of the seven evaluation sites. Officers were considered to have implemented the program with fidelity if the following conditions were met: (a) at least 70% of the lesson content was covered during the lesson; (b) the lesson was delivered in a time frame (longer than 20 min) that would allow the materials to be presented in the intended manner; (c) the officer taught the lesson content in the recommended sequence; (d) students participated in the group activities; and (e) the trained observer rated the implementation quality as good or better at the conclusion of the lesson (a score of 3 or higher on a five-point scale with 1 being low implementation quality and 5 high quality). Our classroom observations indicate that most officers implemented the program with ratings by observers of "average" or "above average" fidelity. Therefore, if a treatment effect is detected in the outcome evaluation, it would be feasible to attribute this effect to the G.R.E.A.T. program.

Classroom observations of G.R.E.A.T. delivery showed that a majority of lessons were taught in a manner consistent with the G.O.T. provided. Most officers had sufficient time management capabilities, adhered to the lessons as they were designed, and implemented the program with fidelity.¹⁰ Officers were classified in one of five categories based on observations of their abilities in the following areas: discussions, activities, time adherence, coverage of topical areas, and overall quality of lesson. In total, 27 of 33 officers were classified as having implemented the program with average or above average fidelity. Specifically, nine officers were classified as having "excellent implementation," eight were "above average," ten were "average," three were "below average," and three were classified as providing "poor implementation" (i.e., any possible program effect could not be attributed to program exposure). Students in the classrooms taught by the three officers who delivered the program with below average fidelity (based on poor-delivery quality) still received a sufficient amount of the program (dosage) with enough fidelity (program adherence) to link outcome effects to the program. These officers tended to have time management problems and were thereby forced to omit parts of lessons, discussion, or activities (and did not return to read-dress missing components).

Summary and Recommendations

The G.R.E.A.T. program has been in existence for nearly 20 years. It is a program that has been designed, implemented, evaluated, redesigned, reimplemented, and is currently undergoing reevaluation (see Esbensen et al. 2011 for a review). It is a program that enjoys extensive federal resources and requires heavy investment by police departments and schools across the country, and as such, it deserves much scrutiny. This is particularly important in the “what works” era of evidence-based practices (Elliott and Mihalic 2004; Fagan and Mihalic 2003; McHugo et al. 2007; Mihalic and Irwin 2003).

We add to the growing body of literature examining program fidelity as a key aspect of program evaluation (Dane and Schneider 1998; Moncher and Prinz 1991). Using a multimethodological approach—specifically, (a) observations of G.O.T.s, (b) surveys and interviews of G.R.E.A.T.-trained officers and supervisors, (c) surveys of school personnel, and (d) “onsite,” direct observations of officers delivering the G.R.E.A.T. program—we examined (a) officer preparedness and commitment to the program, (b) support and involvement of educators, and (c) G.R.E.A.T. program delivery. These areas are consistent with key areas of assessment outlined by Dusenbury and colleagues (2003), and add to the growing body of not only program fidelity research but of multimethodological works in this area (Lillehoj et al. 2004; Melde et al. 2006).

Our process evaluation concludes that the G.R.E.A.T. program was implemented with fidelity in most of the classrooms in the seven sites under current investigation. We find that officers, even those with minimal experience in the classroom, are sufficiently trained and prepared to administer program content. This finding was supported across multiple methods of assessment: our observations of G.O.T., G.R.E.A.T. officers’ self-reports, school personnel verification, and our own objective assessment of program delivery in the classroom. A majority of officers had a firm grasp on classroom and time management. Only 3 of the 33 officers included in this program evaluation were found to have implemented the program with insufficient fidelity to expect program effects in our associated outcome evaluation. These officers did not have sufficient coverage of topical areas and/or they failed to adhere to lessons due largely to a lack of organization on their part. The outcome evaluation data will therefore be analyzed accordingly, such as through the use of fidelity scores (Emshoff et al. 1987; McHugo et al. 2007; Teague et al. 1998).

While this process evaluation concludes that the G.R.E.A.T. program was implemented with sufficient fidelity to reasonably attribute outcome

effects to the program, the implementation of the program was not without some pitfalls. Departures from ideal lesson delivery were most often due to time constraints (as opposed to other possible reasons such as officer incompetence); available class time, for example, was often substantially shorter in the field than was modeled in training. Officers were forced to improvise, combine lessons, reduce coverage, or eliminate activities when the time allotted for the lessons was cut short for some reason. Thus, one recommendation emerging from our process evaluation is for trainers to consider whether the time frame allocated to lesson modeling in training should be modified to be more in-line with what officers will experience during actual program delivery in schools. An alternative would be to highlight specific sections of each lesson which may be *uniformly* shortened if absolutely necessary. On a positive note, many of the other identified issues could be remedied by greater communication between officers and teachers, and greater involvement of teachers in the actual G.R.E.A.T. program. Other reasons associated with officers' lesson modification were classroom misbehavior and atypical situations. We found that classrooms in which teachers took an active role in discipline received the best version of the program. While officers should be capable to control classroom misbehavior during each lesson (and greater attention to this in G.O.T. would improve their skills in this area), teachers could be of invaluable help. They are familiar with students and effective techniques for dealing with the students in their classes. In addition, teachers can also be of assistance in the face of atypical situations, which most often were planned, school-sanctioned events. Teachers knew of these events, but officers were not aware of changes to scheduling. Greater communication between teachers and G.R.E.A.T. officers could limit the problems these situations pose to effective program delivery.

Greater teacher involvement could also help reinforce G.R.E.A.T. lessons and, presumably, increase positive programmatic effects. If teachers participate in G.R.E.A.T. lessons, for example, they will be knowledgeable about lesson content and be able to draw on and reinforce this content in their own curricula, enhancing students' learning of the material and skills. In addition, survey responses of teachers with previous experience of G.R.E.A.T. in their classrooms revealed that teachers usually did not use the extended-teacher activities because they were unaware of them. Better communication between officer and teachers could increase teacher awareness and use of the activities, potentially improving program outcomes.

The cooperation of the host organization—in this case, school personnel—is central to the implementation of any school-based prevention

program (Dusenbury et al. 2003; Peterson and Esbensen 2004). These recommendations clearly have the potential to impact schools' "willingness" to take on programs that require extensive commitment. Our survey of school personnel showed while nearly 90% favored having the G.R.E.A.T. program in their schools, only 56% believed that teachers should incorporate related prevention lessons into their own teaching curricula. This suggests that teachers may not be receptive to adding responsibilities related to outside programming (i.e., not mandated by district standards). Schools obviously need to weigh the costs and benefits associated with participation in school-based prevention programs; our program evaluation suggests, however, that many problems with program implementation could probably be relieved with minimal inconvenience to teachers. Teacher presence in the classroom during program delivery to assist in discipline and enhanced communication with G.R.E.A.T. officers could make a significant difference in the quality of program delivery.

Conclusion

In short, our results suggest that the G.R.E.A.T. program was implemented with fidelity in the vast majority of classrooms included in the Process and Outcome Evaluation of G.R.E.A.T., thereby providing confidence in outcome results. Observations of G.O.T. indicated that the course provided officers with the knowledge and skills to effectively deliver the G.R.E.A.T. program, and observations of program delivery illustrated that officers generally implemented the program as intended. Findings from surveys and interviews with G.R.E.A.T.-trained officers in the seven study sites were also generally consistent with the findings of the onsite observations, while also demonstrating that most of the G.R.E.A.T. officers were committed to the program itself. Observations of program delivery and survey responses from school personnel indicated that, although their involvement in the program was largely limited to a "supporting role" led by the officers, greater involvement of teachers could enhance program delivery. School personnel survey responses, however, suggest that this may be a difficult task, as most indicated a lack of time to devote to the program. Despite the existence of areas for improvement in future implementation, our process evaluation shows, across multiple methods, that the G.R.E.A.T. program is implemented as intended across multiple settings, providing a sound base for outcome analyses and, potentially, adding to the evidence of "what works" in school-based gang and delinquency prevention.

Appendix A: G.R.E.A.T. Lessons

1. Welcome to G.R.E.A.T.—An introductory lesson designed to provide students with basic knowledge about the connection between gangs, violence, drug abuse, and crime.
2. What's the Real Deal?—Designed to help students learn ways to analyze information sources and develop realistic beliefs about gangs and violence.
3. It's About Us—A lesson to help students learn about their communities (e.g., family, school, and residential area) and their responsibilities.
4. Where Do We Go From Here?—Designed to help students learn ways of developing realistic and achievable goals.
5. Decisions, Decisions, Decisions—A lesson to help students develop decision-making skills.
6. Do You Hear What I Am Saying?—Designed to help students develop effective verbal and nonverbal communication skills.
7. Walk in Someone Else's Shoes—A lesson to help students develop active listening and empathy skills, with a particular emphasis on understanding victims of crime and violence.
8. Say It Like You Mean It—Designed to help students develop effective refusal skills.
9. Getting Along Without Going Along—A lesson to reinforce and practice the refusal skills learned in Lesson 8.
10. Keeping Your Cool—A lesson to help students understand signs of anger and ways to manage the emotion.
11. Keeping It Together—Designed to help students use the anger-management skills learned in Lesson 10 and apply them to interpersonal situations where conflicts and violence are possible.
12. Working It Out—A lesson to help students develop effective conflict resolution techniques.
13. Looking Back—Designed to conclude the G.R.E.A.T. program with an emphasis on the importance of conflict resolution skills as a way to avoid gangs and violence; students also present their projects aimed at improving their schools.

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Notes

1. The longer program allows for officers with limited teaching histories to “teach back” lessons and receive feedback on their public-speaking. It also provides a “transition” component that helps officers make the move from their law enforcement orientation to their new role as a prevention program provider (see Taylor, Esbensen, and Peterson, 2009 for more detail).
2. All G.R.E.A.T. Officer Trainings (G.O.T.s) are taught by police officers certified by the National Training Team to teach officers the curriculum. Approximately 5–8 certified officers are present at each training session. They are assisted by a member of the Institute for Intergovernmental Research (to provide technical assistance), a professional educator (to inform teaching pedagogy), and a gang expert (to cover gang trends and characteristics).
3. Observers included the Principal Investigator, the Co-Investigators, and graduate research assistants.
4. Surveys were anonymous. To ensure that duplicate surveys were not included (e.g., the same person returning a survey at both administration), responses to key demographic questions like sex, race/ethnicity, position held, and years at school were compared between the two collections. When a duplicate was discovered, the spring 2007 survey was the only one included in the final sample.
5. To assess the degree to which the random assignment process minimized differences across classrooms (potentially confounding results), we also conducted 108 observations of treatment and control classrooms. Observers noted the physical layout (e.g., resources available in classroom and spaciousness), teachers’ instructional style (e.g., student–teacher interaction and learning activities), teachers’ control of classroom misbehavior, engagement of students, attentiveness of the class, and an overall assessment of the classroom setting. For Gang Resistance Education and

Training (G.R.E.A.T.) classrooms, observers also rated whether classes for each teacher were “Better,” “the Same,” or “Worse” on each of the above criteria during classes when G.R.E.A.T. was not in session. Observers noted no overt classroom differences between the G.R.E.A.T. and control classrooms.

6. A total of 26 sets of classroom observations were conducted for IRR (representing 14 of 33 total officers). Both qualitative and quantitative components of the two observations were assessed. Overall IRR, or percent agreement, was 85.4%. Two IRR observations had agreement of less than 69% (46% and 29%) and were based on observations of an officer who was determined not to have taught the program with sufficient fidelity.
7. It is important to note that officers in Portland deliver the G.R.E.A.T. program on an overtime basis. Thus, the pooled survey responses may mask site-specific differences in responses.
8. A total of 72 school personnel provided a response to this question, and many provided more than one answer.
9. The G.R.E.A.T. training provides guidelines about how officers are to handle time management. For example, in instances when a lesson needs to be shortened, officers are instructed to skip introductions and/or wrap-ups, but never to skip the “Life in the Middle” skit. Our observations revealed that officers followed these guidelines often.
10. We did not observe systematic differences in the program delivery between classes taught by the same officer, and therefore, findings are presented at the officer level and not the classroom. There is one exception: One officer taught the program in a particularly disruptive classroom. Observers concluded that the program was not delivered in this classroom, though they did conclude that the program was delivered with “average” implementation fidelity in the four other classrooms taught by the same officer.

References

- Basch, C. E., E. M. Sliepcevich, R. S. Gold, D. F. Duncan, and L. J. Kolbe. 1985. “Avoiding Type III Errors in Health Education Program Evaluations: A Case Study.” *Health Education and Behavior* 12:315-31.
- Dane, A. V., and B. H. Schneider. 1998. “Program Integrity in Primary and Early Secondary Prevention: Are Implementation Effects out of Control?” *Clinical Psychology Review* 18:23-4.
- Dobson, D., and T. J. Cook. 1980. “Avoiding Type III Error in Program Evaluation: Results From a Field Experiment.” *Evaluation and Program Planning* 3:269-76.
- Dumas, J. E., A. M. Lynch, J. E. Laughlin, E. P. Smith, and R. J. Prinz. 2001. “Promoting Intervention Fidelity: Conceptual Issues, Methods, and Preliminary

- Results From the Early Alliance Prevention Program.” *American Journal of Preventive Medicine* 20:38-47.
- Durlak, J. A., and E. P. DuPre. 2008. “Implementation Matters: A Review of Research on the Influence of Implementation on Program Outcomes and the Factors Affecting Implementation.” *American Journal of Community Psychology* 41:327-50.
- Dusenbury, L., R. Brannigan, M. Falco, and W. B. Hansen. 2003. “A Review of Research on Fidelity of Implementation: Implications for Drug Abuse Prevention in School Settings.” *Health Education Research* 18:237-56.
- Elliott, D. S., and S. Mihalic. 2004. “Issues in Disseminating and Replicating Effective Prevention Programs.” *Prevention Science* 5:47-53.
- Emshoff, J. G., C. Blakely, R. Gottschalk, J. Mayer, W. S. Davidson, and S. Erickson. 1987. “Innovation in Education and Criminal Justice: Measuring Fidelity of Implementation and Program Effectiveness.” *Educational Evaluation and Policy Analysis* 9:300-11.
- Esbensen, F. A., A. Freng, T. J. Taylor, D. Peterson, and D. W. Osgood. 2002. “Putting Research Into Practice: *The National Evaluation of the Gang Resistance Education and Training (G.R.E.A.T.) Program*.” In *Responding to Gangs: Evaluation and Research*, edited by W. L. Reed and S. H. Decker, 139-67. Washington, DC: U.S. Department of Justice, National Institute of Justice.
- Esbensen, F. A., and D. W. Osgood. 1999. “Gang Resistance Education and Training (G.R.E.A.T.): Results From the National Evaluation.” *Journal of Research in Crime and Delinquency* 36:194-225.
- Esbensen, F. A., D. W. Osgood, T. J. Taylor, D. Peterson, and A. Freng. 2001. “How Great is G.R.E.A.T.? Results From a Quasi-Experimental Design.” *Criminology and Public Policy* 1:87-118.
- Esbensen, F. A., D. Peterson, T. J. Taylor, A. Freng, D. W. Osgood, D. C. Carson, and K. N. Matsuda. 2011. “Evaluation and Evolution of the Gang Resistance Education and Training Program.” *Journal of School Violence* 10:53-70.
- Fagan, A. A., K. Hanson, J. D. Hawkins, and M. W. Arthur. 2008. “Bridging Science to Practice: Achieving Prevention Program Fidelity in the Community Youth Development Study.” *American Journal of Community Psychology* 41:235-49.
- Fagan, A. A., and S. Mihalic. 2003. “Strategies for Enhancing the Adoption of School-Based Prevention Programs: Lessons Learned From the Blueprints for Violence Prevention Replications of the Life Skills Training Program.” *Journal of Community Psychology* 31:235-54.
- Gottfredson, D. 2001. *Schools and Delinquency*. New York, NY: Cambridge University Press.
- Heller, K. 1996. “Coming of Age in Prevention Science: Comments on the 1994 National Institute of Mental Health-Institute of Medicine Prevention Reports.” *American Psychologist* 51:1123-7.

- Kovaleski, J. H., E. E. Gickling, H. Morrow, and P. R. Swank. 1999. "High Versus Low Implementation of Instructional Support Teams: A Case for Maintaining Program Fidelity." *Remedial and Special Education* 20:170-83.
- Lillehoj, C. J., K. W. Griffin, and R. Spoth. 2004. "Program Provider and Observer Ratings of School-Based Preventive Intervention Implementation: Agreement and Relation to Youth Outcomes." *Health Education and Behavior* 31:242-57.
- Lipsey, M. 2009. "The Primary Factors That Characterize Effective Interventions With Juvenile Offenders: A Meta-Analytic Overview." *Victims and Offenders* 4:124-47.
- McHugo, G. J., R. E. Drake, R. Whitley, G. R. Bond, K. Campbell, C. A. Rapp, H. H. Goldman, W. J. Lutz, and M. T. Finnerty. 2007. "Fidelity Outcomes in the National Implementing Evidence-Based Practices Project." *Psychiatric Services* 58:1279-84.
- Melde, C., F. A. Esbensen, and K. Tusinski. 2006. "Addressing Program Fidelity Using Onsite Observations and Program Provider Descriptions of Program Delivery." *Evaluation Review* 30:714-30.
- Mihalic, S. F., and K. Irwin. 2003. "Blueprints for Violence Prevention: From Research to Real-World Settings—Factors Influencing the Successful Replication of Model Programs." *Youth Violence and Juvenile Justice* 1:307-29.
- Moncher, F. J., and R. J. Prinz. 1991. "Treatment Fidelity in Outcome Studies." *Clinical Psychology Review* 11:247-66.
- Peterson, D., and F. A. Esbensen. 2004. "The Outlook is G.R.E.A.T.: What Educators Say About School-Based Prevention and the Gang Resistance Education and Training (G.R.E.A.T.) Program." *Evaluation Review* 28:218-45.
- Rossi, P. H., H. E. Freeman, and M. W. Lipsey. 1999. *Evaluation: A Systematic Approach*. 6th ed. Thousand Oaks, CA: SAGE.
- Taylor, T. J., F. A. Esbensen, and D. Peterson. 2009. *National Evaluation of the Gang Resistance Education and Training (G.R.E.A.T.) Program: G.R.E.A.T. Officer Training (G.O.T.) Report*. St. Louis, MO: University of Missouri—St. Louis.
- Teague, G. B., G. R. Bond, and R. E. Drake. 1998. "Program Fidelity in Assertive Community Treatment: Development and Use of a Measure." *American Journal of Orthopsychiatry* 68:216-32.
- Winfree, L. T., Jr., D. Peterson Lynskey, and J. R. Maupin. 1999. "Developing Local Police and Federal Law Enforcement Partnerships: G.R.E.A.T. as a Case Study of Policy Implementation." *Criminal Justice Review* 24:145-68.

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